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FEDERAL COMMUNICATIONS COMMISSION
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By Hand Delivery

Ms. Magalie R. Salas, Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: In the Matter of The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010, WT Docket No. 96-86 (rel. October 24, 1994).

Dear Ms. Salas:

Enclosed for filing in the above-referenced proceeding is an original and (11) copies of the Reply Comments of the Federal Law Enforcement Wireless Users Group regarding the implementation of public safety communications as mandated by the Balanced Budget Act of 1997, Pub. L. No. 105-33, 111 Stat. 251 (1997) (codified at 47 U.S.C. § 337), and an accompanying Certificate of Service.

An additional copy of comments is enclosed to be stamped "received" and returned.

Thank you very much for your attention to this matter.

Sincerely,


James J. Flyzik

Deputy Assistant Secretary (Information Systems) and
Chief Information Officer, Department of the Treasury, and
Vice Chair, Government Information Technology Services
(GITS) Board

Enclosure

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

In the Matter of

**The Development of Operational, Technical,
and Spectrum Requirements for Meeting Federal,
State, and Local Public Safety Agency Communication
Requirements Through the Year 2010**

WT Docket No. 96-86

**REPLY COMMENTS OF THE
FEDERAL LAW ENFORCEMENT WIRELESS USERS GROUP
(FLEWUG)**

January 26, 1998

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I. INTRODUCTION

1. The Federal Law Enforcement Wireless Users Group¹ (FLEWUG) respectfully submits the following comments in response to comments filed by other parties regarding the Notice of Proposed Rulemaking (NPRM) of the above referenced proceeding.² The foundation of the FLEWUG's comments rest on its belief that citizens have a legitimate expectation that when their life, liberty, or property is in danger, public safety will respond. The effectiveness of public safety agencies is tied to their ability to communicate. Increasingly, we have seen the need for multiple levels of public safety agencies to respond to crises, as demonstrated by the World Trade Center bombing in 1993 and by the bombing in Oklahoma City in 1995. The role of federal agencies in those situations was essential to emergency response efforts. The FLEWUG applauds the Commission for recognizing the national importance of public safety communications and for bringing the issue to the forefront. Implementation of this ruling will bring public safety communication capabilities into the 21st century and will allow public safety agencies to perform their jobs more effectively.

II. REPLY COMMENTS

A. GENERAL COMMENTS

1. Ensuring Efficient Spectrum Use

2. The FLEWUG concurs with Motorola that the Commission should adopt rules to facilitate the development of shared public safety communications systems. Shared systems would help ensure public safety communications needs are met in a spectrally efficient manner and public safety agencies are provided adequate access to spectrum in times of crisis. Partnerships between local, state, and federal public safety users in the newly allocated³ 24 megahertz at 764-776 MHz and 794-806 MHz would help ensure

¹ The FLEWUG consists of law enforcement and public safety officials from the Department of the Treasury, Department of Justice, Department of the Interior, Department of Agriculture, Department of Defense, Department of Health and Human Services, United States Postal Service, National Telecommunications and Information Administration, Federal Emergency Management Agency, Internal Revenue Service, Federal Bureau of Investigation, United States Secret Service, United States Coast Guard, United States Capitol Police, Drug Enforcement Administration, United States Park Police, Immigration and Naturalization Service, United States Customs Service, Bureau of Alcohol, Tobacco, and Firearms, United States Mint, National Communications System, Defense Information Systems Agency, National Security Agency, Federal Law Enforcement Training Center, Bureau of Engraving and Printing, United States Marshals Service, National Institute of Standards and Technology, United States Forest Service, United States Fish and Wildlife Service, and Federal Bureau of Prisons.

² In the Matter of the Development of Operational, Technical, and Spectrum Requirements for Meeting Federal, State, and Local Public Safety Agencies Communication Requirements Through the Year 2010, *Notice of Proposed Rulemaking, WT Docket No. 96-86, released October 24, 1997 (referred to here as the "Public Safety NPRM")*.

³ In the Matter of Reallocation of Television Channels 60-69, the 746-806 MHz Band. Report and Order, ET Docket No. 97-157, released January 6, 1998.

effective use of public safety resources, such as system infrastructure, subscriber units, and frequency spectrum.

3. The FLEWUG recognizes spectrum congestion is experienced by many public safety agencies located along international borders. We support the recommendation of the New York State Police (NYSP) that the Commission make every effort to ensure some type of compatible user requirements for channels along international borders. The newly allocated 24 megahertz will not necessarily resolve congestion problems in border-zone areas.

2. Public Safety Allocations

4. The FLEWUG supports the National Telecommunications and Information Administration (NTIA), the Commonwealth of Pennsylvania, and Compu-Dawn in approving the Commission's proposal to divide the allocation into two classifications: general use spectrum and interoperability spectrum. By separating the spectrum into two classifications, we believe the issue of interoperability between all levels of government can be addressed, while providing much needed spectral relief to the public safety community.

5. In addition to the new 24 megahertz allocation at 764-776 MHz and 794-806 MHz, several commenters⁴ emphasize the need for additional spectrum in other public safety bands. The FLEWUG agrees that additional spectrum must be identified and that the newly allocated 24 megahertz at 764-776 MHz and 794-806 MHz is thought to be a short-term solution for immediate spectrum needs. The Public Safety Wireless Advisory Committee (PSWAC) made a recommendation in its final report that suggests the Commission should allocate a total of 97.5 MHz for public safety use. We support this recommendation, as does the State of California. As the City of Richardson, TX, the Major Cities Police Chiefs' Association (MCPCA), and the International Association of Chiefs of Police (IACP) point out, meeting the PSWAC recommendation requires the Commission to identify another 73.5 MHz of spectrum to satisfy existing and future communications needs. Along with the MCPCA, we urge the Commission to identify this additional spectrum for public safety use in a time certain. The MCPCA suggests a five to fifteen year timeframe. We believe this is too long a period to address such a pressing need, and urge a three to seven year timeframe. With the advent of advanced technologies that require more spectrum and the increased inter-agency coordination that is required to effectively respond to crises, public safety's requirement for spectrum continues to grow. Our suggested timeline would allow spectrum allocations to keep pace with the increasing demands of public safety.

6. The American Red Cross, states the entire frequency allotment for national disaster response consists of one low band channel in an overcrowded frequency range.

⁴ The NTIA, National League of Cities (NLC), Joint Commenters (American Association of State Highway and Transportation Officials, Forestry Conservation Communications Association, International Association of Fire Chiefs, Inc., International Association of Fish and Wildlife Agencies, International Municipal Signal Association, National Association of State Foresters), Major Cities Police Chiefs' Association (MCPCA), International Association of Chiefs of Police (IACP), and the State of California.

They advocate the Commission designate two conventional duplex channels for nationwide national disaster agency use. Although the FLEWUG agrees that disaster relief agencies are operating on a small, perhaps insufficient segment of frequency, issues such as specific channel allocation and eligibility should be decided by the national interoperability coordination body that we recommend as the oversight entity for the use of the interoperability spectrum. We would commend this issue to such a body for careful consideration. However, we support the notion that more spectrum for national disaster response may be merited.

7. The FLEWUG strongly disagrees with Primeco Personal Communications' belief that the 24 MHz of new public safety spectrum is "enough" to satisfy public safety communications. As stated earlier, we strongly support, along with several commenters,⁵ the identification of 97.5 MHz of spectrum for public safety as recommended in the PSWAC Final Report. Until the remaining 73.5 MHz of spectrum is identified, public safety communications needs remain unsatisfied.

B. INTEROPERABILITY SERVICE RULES

8. The FLEWUG supports, along with the State of California and the Commonwealth of Pennsylvania, the Commission's definition of interoperability and mission critical as provided in the NPRM.

9. The FLEWUG disagrees with the definitions of "mutual aid" and "interoperability" provided by the National Public Safety Telecommunications Council (NPSTC).⁶ We disagree with the definition of "mutual aid" because mutual aid efforts often require communications among agencies of similar and dissimilar disciplines. We feel that, because the definition is too restrictive, limiting mutual aid to the definition proposed by NPSTC could encourage parochial behavior with respect to obtaining and utilizing frequencies. Although we believe there is merit in how NPSTC frames the definition of interoperability as a more specific expansion of the PSWAC definition, we disagree with the NPSTC definition of interoperability since it relies on the NPSTC definition of mutual aid, which is too restrictive and narrow.

1. Location and Amount of Interoperability Spectrum

10. The FLEWUG fully supports the identification of interoperability channels in the newly allocated 24 megahertz at 764-776 MHz and 794-806 MHz and recommends that 2.5 MHz of this allocation be set aside for interoperability purposes. We agree with the commenters⁷ requesting 2.5 MHz of additional interoperability spectrum be designated throughout public safety bands below 512 MHz as proposed by the PSWAC Final Report. This recommendation stems from public safety communications being located in

⁵ The State of California, City of Richardson (TX), MCPCA, and the IACP.

⁶ Comments of the National Public Safety Telecommunications Council, p.5, paragraphs 6-12.

⁷ The NPSTC, NTIA, NYSP, City of Richardson (TX), Joint Commenters, State of California, MCPCA, IACP, Motorola, and the NLC.

several frequency bands⁸: low-band VHF (25-50 MHz), high-band VHF (138-144 MHz, 150-174 MHz), low-band UHF (406.1-420 MHz, 450-512 MHz), and high-band UHF (764-776 MHz, 794-806 MHz, 806-824/851-869 MHz). We believe placing all interoperable spectrum in 764-776/794-806 MHz would not necessarily enhance interoperability. We believe, in addition to the interoperability spectrum set aside in 764-776/794-806 MHz, additional spectrum is needed below 512 MHz for interoperable communications.

11. Although the FLEWUG supports the allocation of 2.5 MHz of interoperability spectrum in 764-776/794-806 MHz, we disagree with those commenters⁹ who presented channel allocation plans for the interoperability spectrum. We believe it is premature to promulgate allocation plans. We feel the national interoperability coordination body¹⁰ that we recommend should decide the channel allocation plans for interoperability channels. This body could consider the plans provided by certain other commenters to this proceeding along with other channel allocation schemes.

12. The City of Long Beach, CA, recommends the reallocation of channels in the 380-400 MHz band and TV channels 7-13 (174-216 MHz) to public safety services. The FLEWUG strongly disagrees with moving public safety to 380-400 MHz, because this band is neither adjacent to, nor within, any existing public safety bands, and we fail to see the enhancements that this frequency band may bring to public safety interoperability. However, we agree with the reallocation of TV channels 7-13 to public safety. The NPSTC suggests the 138-144¹¹ MHz band, primarily used by the Department of Defense (DoD), as a possible location for shared public safety interoperability spectrum. The FLEWUG agrees that the 138-144 MHz band could be managed in a fashion to provide additional spectrum for interoperability. Portions of this band could be shared with public safety through effective coordination between the NTIA and the Commission. However, care must be taken to ensure such sharing does not impede the DoD's ability to meet its mission.

2. Types of Communication

13. The FLEWUG joins NPSTC in supporting the Commission's designation of four types of interoperability communications: voice, data, image/high-speed data (image/HSD), and video. We disagree with the State of California's and the Commonwealth of Pennsylvania's assertions that voice is the primary type of interoperability communication need. The State of California further states data communications are of secondary importance and image, high-speed data, and video communications are not required applications on the interoperability spectrum. On the contrary, the FLEWUG believes the Commission's four general categories encompass a variety of public safety transmissions and allow public safety personnel to utilize all

⁸ The FLEWUG recognizes that allocated public safety frequency bands are subject to change and the list provided here represents present day allocations.

⁹ The State of California, Motorola, and the State of Florida.

¹⁰ This body is further detailed in Section A.8 (paragraph 25) of our original NPRM comments and in Section B.7 of these comments.

¹¹ The Department of Defense does not concur with the FLEWUG's position on the 138-144 MHz band.

available resources to meet their communications needs in all types of situations. We agree with NPSTC's point that there is insufficient spectrum in the 764-776/794-806 MHz range to accommodate full-motion video, and support NPSTC's proposal that the Commission, in a later rulemaking, allocate additional spectrum in other higher frequency bands for this application.

14. In their comments to the NPRM, NPSTC proposes a channelization plan for the interoperability spectrum. The plan encompasses channel allocations for each type of interoperable communications. While the FLEWUG believes NPSTC's recommendations could serve as useful input to the national interoperability coordination body, we feel it is premature for the Commission to adopt a channelization plan, or designate an amount of spectrum for each category. Detailed management of the interoperability spectrum should be the responsibility of the national interoperability coordination body. This body should establish a framework that will ensure nationwide uniformity in the use of this spectrum to facilitate seamless, nationwide interoperability.

15. The FLEWUG disagrees with Motorola's recommendation that a minimum of 2 MHz be allocated for data interoperability. We believe it is premature to make such a designation. Additionally, we disagree with the short timeline associated with Motorola's comments on the development of data interoperability standards. It is inappropriate at this time to impose such a deadline specifically for data standards. We also disagree with Motorola's proposal to reassign the data interoperability channels to the general use spectrum in the event that data standards are not developed within their proposed time period. We strongly urge such matters be addressed by the national interoperability coordination body.

3. Transmission Technology

16. The FLEWUG disagrees with the City of Richardson, TX's recommendation requiring analog technology on interoperability channels. Along with the Commonwealth of Pennsylvania, we believe that future advances of, and potentials for, digital technologies in land mobile radio applications far surpass the future potential of analog technology. Therefore, digital modulation on voice channels should be required as technologies evolve. We support the NTIA stance that the public safety user is best equipped to determine which transmission technology best suits their needs. Because of incompatibilities between analog and digital systems, a date certain must be mandated to allow for smooth transition to digital technologies.

17. The FLEWUG further concurs with the Commonwealth of Pennsylvania on issues regarding the development and adoption of digital standards for the interoperability channels. Along with the Commonwealth of Pennsylvania, we believe that efficient and affordable use of spectrum is dependent on well developed and widely deployed standards. We reiterate our agreement with the PSWAC Final Report that digital standards for voice interoperability should be developed within two years through an open and fair process to allow for migration to digital technology.

4. Channel Spacing and Channel Requirements

18. The FLEWUG supports those commenters¹² who base their channel spacing on the PSWAC Final Report recommendations. We specifically support the development of channel spacing specifications that are consistent with the bandwidth, types of communications, and technology supported by this spectrum. We also support the use of the proposed national interoperability coordination body to oversee channel spacing and channel requirement issues.

5. Equipment Standards

19. The FLEWUG agrees with the commenters¹³ who support the requirement that all radios be capable of operating on interoperability channels throughout the designated bandwidth of the interoperability spectrum. We believe for effective interoperability to occur, public safety officials must be able to operate on the assigned interoperability channels.

20. The FLEWUG disagrees with the State of California's support for strictly analog FM system standards, and recommends receiver standards be adopted for both analog and digital systems. We realize to improve interoperable communications among public safety agencies, receiver standards must be applicable to all types of receivers used by public safety agencies. Therefore, we generally agree with the commenters¹⁴ recommending the adoption of receiver standards. We strongly support NPSTC in requesting receiver standards be mandatory for the interoperability spectrum. In addition, we also support the NTIA recommendation that the adopted receiver standards be consistent with appropriate NTIA and Telecommunications Industry Association (TIA) standards.

6. Definitions

21. The FLEWUG strongly agrees with the numerous commenters¹⁵ who call for the inclusion of federal agencies in the definition of public safety service provider, in a fashion consistent with the PSWAC Final Report, and in contrast to the proposed Commission definition, which excludes federal agencies. The FLEWUG believes the Commission's NPRM accurately cites the definition of public safety services as provided in Section 337 (f)(1) of the Communications Act of 1934,¹⁶ as amended by the Balanced Budget Act of 1997, § 3004.¹⁷ The FLEWUG believes the definition of public safety services in the statute was purposely limited to address the eligibility for licensing and

¹² The NPSTC, State of Florida, NTIA, and the NLC.

¹³ The State of Florida, NLC, State of California, NPSPAC Region 49, and the NPSTC.

¹⁴ The State of Florida, American Water Works Association (AWWA), NPSTC, and the NTIA.

¹⁵ The State of California, NYSP, City of Richardson (TX), NLC, NPSTC, NTIA, State of Florida, California Public-Safety Radio Association (CPRA), Motorola, Commonwealth of Pennsylvania, City of Long Beach (CA), IACP, and the MCPCA.

¹⁶ 47 U.S.C. § 337(f)(1).

¹⁷ Balanced Budget Act of 1997, § 3004.

assignment of spectrum between 746 and 806 MHz only.¹⁸ We believe the definition as provided in the statute was not intended as the basis for an overly limited definition of public safety service providers. It is important to note and reaffirm that federal public safety entities are integral members of the public safety community and the definition of public safety services (including federal public safety entities) should remain as stated in the PSWAC Final Report. We fully endorse and urge the Commission to adopt the PSWAC definition of public safety services and to base any broad definition of public safety service provider on this PSWAC definition.

22. Likewise, the definition of public safety service provider as proposed by the Commission¹⁹ may be "... helpful in developing service rules for the 746-806 MHz band" but is too limiting to be considered as an overall prevailing definition. Again, the FLEWUG believes the Commission should reevaluate the congressional definition of public safety services in section 337 (f)(1) of the Communications Act²⁰ to include federal public safety agencies. We believe Congress is delineating eligibility for licensing and assignment for 764-776/794-806 MHz²¹; Congress is not redefining the term public safety services. We advocate the Commission's final rules be changed to clearly identify federal public safety entities as public safety service providers.

23. The adoption of the PSWAC Final Report definition of public safety service providers would truly enable the opportunity for interoperability among all public safety entities (local, state, and federal). Several commenters²² stated the inclusion of federal agencies in the definition of public safety will allow for the implementation of shared and joint-use systems and promote the ideals of interoperability and spectral efficiency. The FLEWUG strongly agrees with these commenters. We also agree with NPSTC's view that if legislation prohibits the application of the PSWAC definitions in their entirety, Congress should amend legislation appropriately.

24. Following the PSWAC definition of public safety, the FLEWUG strongly disagrees with Compu-Dawn's statement that they "fit squarely" within the definition of public safety. We believe Compu-Dawn and companies that provide similar services are not public safety service providers. We also take special notice of the American Petroleum Institute's (API) concurrence with the Commission's intent to include non-governmental entities charged with public safety responsibilities in eligibility requirements. We agree with API's assertion provided the non-governmental entity is under contract to a public safety entity and the frequency license(s) is (are) held by the

¹⁸ The FLEWUG advocates licensing of interoperability spectrum in the 746-776/794-806 MHz band to local, state, and federal public safety agencies. Despite the definition stated in the Balanced Budget Act, we believe the ability of federal agencies to license frequencies in the interoperability spectrum is essential for intergovernmental interoperability.

¹⁹ Public Safety NPRM paragraph 75.

²⁰ 47 U.S.C. § 337(f)(1), as amended by the Balanced Budget Act of 1997, § 3004.

²¹ Again, the FLEWUG emphasizes the need for federal agencies to be eligible for licenses in the interoperability spectrum. Until such eligibility is adopted, interoperability at all levels (local, state, and federal) will be hampered.

²² The NTIA, Commonwealth of Pennsylvania, State of Florida, City of Long Beach, CA, IACP, Motorola, and the MCPCA.

public safety entity and not the contractor organization. With this clarification, API's statement appears to parallel the definition of public safety in the PSWAC Final Report. We also believe companies, such as Compu-Dawn, should be subject to the non-governmental license requirements we stipulated in response to API.

7. National and Regional Planning

25. The FLEWUG believes the NPSPAC regional planning process did not fully accomplish one of the primary goals set forth in the NPSPAC national plan which was to facilitate interoperability between communications systems to permit local, state, and federal agencies to coordinate their activities. The FLEWUG suggests several reasons for the inability of the NPSPAC process to fully achieve its goals. The lack of oversight at the national level is a key reason. Such oversight could have occurred using a national review committee as recommended in the NPSPAC Final Report. Despite the Commission's statement of support for the formation of the national review committee, it was never formed. As stated in the NPSPAC Final Report, the intended purpose of the national review committee was to ensure that the primary goals of the NPSPAC national plan were achieved in a timely manner. Without the guidance of a national committee, local and intra-agency concerns for interoperability overshadowed the concerns of nationwide interoperability. The sometimes parochial nature of the regional planning committees also limited the ability of the NPSPAC process to achieve the Commission's goals. Typically, membership in these committees has been dominated by law enforcement agencies from large metropolitan jurisdictions. The lack of participation by a more representative array of public safety officials from a more diverse set of jurisdictions in the regional planning committees is due in part to another operational limitation of the NPSPAC process, namely, the lack of funding. Most small public safety agencies consisting of less than 25 members did not have adequate funding to either participate in the Committee meetings or to design and develop new 800 MHz systems.

26. The FLEWUG believes the aforementioned limitations of the NPSPAC process must be addressed to achieve the primary goal of seamless interoperability nationwide. We suggest some form of national interoperability coordination body be established or designated as was recommended in the NPSPAC Final Report. The national interoperability coordination body should be made up of users, systems managers, and government officials. It should not include persons or representatives from organizations that may benefit financially as a result of the actions of the body or that may have other conflicts of interest that could erode the body's ability to act fairly and appropriately on behalf of public safety and the public in general. We propose this national interoperability coordination body develop a national interoperability plan that would provide the rules and regulations governing the use of the interoperability spectrum nationwide. The plan should be developed based on comments provided by each of the existing 55 Regional Committees as well as comments provided by other interested parties such as the FLEWUG. Once the national interoperability coordination body approves the plan, it shall release the plan to the regional committees accompanied by a schedule for its implementation. The national interoperability coordination body would then oversee and audit the implementation of this plan and provide guidance and general

aid to any region needing such assistance in meeting the plan's requirements within the scheduled timeframe.

27. The FLEWUG believes it is imperative to develop a common national interoperability plan that provides strict guidelines for the use of the interoperability spectrum. In comments submitted by NPSTC, many suggestions for the responsibilities of the national interoperability plan are given. We take exception to these suggestions on two points. First, we are concerned with NPSTC's recommendation that the national interoperability plan provide a framework, with enforcement, for the return of channels that may be replaced through the utilization of the new spectrum. We believe this statement is incomplete and may lead to a misunderstanding regarding the spectrum needs of public safety. The newly allocated 24 megahertz is not to be used in lieu of existing spectrum. Rather, the new allocation is a first step toward securing the 97.5 megahertz of additional spectrum recommended in the PSWAC Final Report. NPSTC's statement suggests the new allocation is justification for returning existing public safety channels for reassignment for possibly non-public safety purposes. We believe such a framework is squarely counter to the intent of the NPRM. Any returned channels should be reassigned exclusively to public safety agencies to meet existing unmet requirements. Second, we are concerned that no ties are made between the proposed national interoperability plan and the operational plans of the public safety agencies. We believe it is essential that spectrum assignment and management plans directly support the applicable strategic operational plans. Without this direct link between the two types of plans, we question the value of the spectrum assignment and management plans.

28. The FLEWUG believes it is premature to limit or define at this time the responsibilities of the national interoperability plan. We suggest the aforementioned national interoperability coordination body be responsible for determining the specific duties of the national interoperability plan. We support the involvement of the NTIA and the American Red Cross in national planning efforts and commend both organizations for volunteering their participation. We also express our strong desire and willingness to participate in the national planning process. We also suggest the participation of the Public Safety Wireless Network (PSWN) program in the planning effort. The PSWN program is a National Performance Review initiative committed to improving the interoperability of public safety wireless communications. The PSWN program is currently responsible for developing a national implementation plan for interoperability. In support of this goal, the PSWN program is engaged in a series of outreach efforts, analyses, and systems development studies to address and resolve challenges associated with interoperability (i.e., spectrum, technology, funding, organization, and operations). The evolving knowledge base and expertise of the PSWN program regarding interoperability matters make it a valuable resource that should be leveraged in any national planning effort related to the new spectrum. Toward this end, the PSWN program could support the deliberations of the national interoperability coordination body.

29. The FLEWUG disagrees with the State of California's support for regional planning, rather than national planning. We believe that, once approved, the national interoperability plan would then be released to the regional planning committees. By

allowing the national interoperability plan to establish a strong framework for regional plans, we feel the public safety community will be able to maximize the benefits of the 764-776/794-806 MHz allocation.

30. The FLEWUG supports NPSTC's disagreement to the Commission's recommendation to further divide regions into "sub-regions." We feel the establishment of "sub-regions" would create additional bureaucracy and increase financial burdens on local public safety agencies. In addition, we believe the establishment of a national interoperability coordination body, with an affiliated set of "super-regions," would provide the coordination needed among regions to best improve public safety interoperability.

8. Categories of Interoperability Uses

31. The FLEWUG supports the Commission's proposed categories of interoperability (mutual aid, emergency preparedness/task force, and day-to-day) and believes channel allocations for these categories should be decided at the national level. Therefore, we disagree with the commenters²³ who recommend that channel use and channel allocations for each category of interoperability be decided at the regional level. We strongly believe to achieve nationwide interoperability, the rules and regulations of the interoperability spectrum must be established at the national level through a national interoperability coordination body. Until such rules and regulations are established, we feel it is inappropriate to make channel allocations for categories of interoperability use. Thus, we disagree with Motorola's suggestion to allocate 10 mutual aid voice channels for pre-planned interoperability efforts.

9. Eligibility and Use of Interoperability Channels

32. The FLEWUG disagrees with NPSTC's recommendation that, for interoperability spectrum only, the final determination of who is and who is not an eligible user should be left to the planning committees. We believe the previously described national interoperability coordination body should develop rules and regulations governing the eligibility and use of the interoperability spectrum nationwide. We believe interoperability among local, state, and federal public safety agencies is essential for the protection of life and property, and only at the national level can adequate coordination among all levels of government occur.

33. The FLEWUG, along with NPSPAC Region 20, takes special notice of the Commission's intent to broaden the eligibility for interoperability channels to include non-governmental agencies. As stated previously, we agree with the inclusion of non-governmental agencies provided that the non-governmental entity is under contract with a public safety entity and the frequency license(s) is (are) held by the public safety entity and not the contractor organization.

²³ The State of Florida, Motorola, and the APCO International.

10. Trunking on Interoperability Spectrum

34. The FLEWUG disagrees with the underlying premise that trunking should be implemented on the interoperability spectrum for nationwide use. For this reason, we support the NPSTC's disagreement with the Commission's conclusion that a trunked system is the best, and possibly only practicable method by which wireless communications between different agencies and regions may be rapidly coordinated in a large-scale emergency. Instead, the FLEWUG envisions the interoperability spectrum as a frequency range with baseline technological requirements where all public safety agencies can communicate with each other irrespective of their technological capabilities. Trunking on the interoperability spectrum would not facilitate interoperability because many public safety agencies do not use trunking technology. There are many areas of the country where conventional systems meet spectrum needs, and the deploying of trunked systems would not be an efficient use of resources. With the increased costs associated with trunking in an era of scarce funds for public safety communications, requiring all public safety agencies to invest in trunking equipment for a small slice of spectrum would unnecessarily burden already stretched public safety budgets.

11. Technical Standards for Interoperability Spectrum

35. The FLEWUG strongly disagrees with Motorola's recommendation to resist mandating technical standards. We fully support technical standards for interoperability spectrum and advocate the required adoption of such standards by users of this spectrum.

36. The FLEWUG shares the Commission's preference to rely on equipment manufacturers to develop standards through such entities as the TIA. We support further development of standards in the manner of TIA-102, and we also support consideration of the Trans-European Trunked Radio (TETRA) standard.

37. In the FLEWUG's view, the standards development option that has the greatest likelihood of success is an open standard, created by an American National Standards Institute (ANSI) accredited entity. It should include industry involvement and the ability to operate on a fast track through the appropriate use of resources including academia, national laboratories, and public funds. Such standards should be nationally mandated for the public safety spectrum to fulfill interoperability goals and to aggregate the buying power of the public safety sector, thereby encouraging competition in the marketplace.

C. GENERAL SERVICE RULES

1. Regional Planning Committees

38. The FLEWUG disagrees with both Motorola and the State of Florida's belief that the existing regional planning structure, which was established for the planning and management of the NPSPAC channels, be used to govern the licensing of the 764-776/794-806 MHz public safety allocation. We believe the idea of regional planning is sound, but the structure and execution of the planning process needs improvement. Therefore, rather than use the existing model of regional planning, the FLEWUG, along with several commenters,²⁴ appeals for changes and improvements to the regional planning process. We concur with other suggested changes and we reiterate our own suggested modifications in the following paragraphs.

39. A stringent schedule should be proposed for the development and the associated approvals of original and revised regional plans. The regional planning process proposed within the NPSPAC national plan lasted over five years. However, most regional committees required less than a few months to develop and submit their regional plans. Others waited five years and submitted their plans as a defense mechanism to maintain the spectrum. By expediting the process, spectrum requirements can be more quickly addressed and any remaining available spectrum can be readily assigned to frequency deficient public safety agencies.

40. The FLEWUG suggests federal agencies be allowed to participate in the regional planning committees so that the possibility of shared system use can be explored. By allowing federal agencies to explore this possibility, particularly at the onset of the development process, it is our hope to promote shared system use among local, state, and federal public safety agencies and to streamline those existing processes that allow for federal use of state and local frequencies.

41. The FLEWUG disagrees with both the Commonwealth of Pennsylvania and the Joint Commenters' belief that regional boundaries should be "state-based." We believe the current regional boundaries should be maintained unless the regional committees propose an agreeable alternative for modifications to these boundaries. Additionally, we believe there are notable instances where multi-state regions have benefited from the current regional boundaries. Metropolitan areas such as New York, Chicago, and Washington, D.C. have all experienced effective regional planning through the use of multi-state regions. We believe these comments further bolster our recommendation for "super-regions." If designed properly, these "super-regions" would consist of seven to ten adjacent NPSPAC regions with no state divided between "super-regions." "Super-regions" are discussed in full in paragraph 44.

²⁴ The APCO International, Joint Commenters, NLC, City of Richardson (TX), CPRA, Commonwealth of Pennsylvania, NYSP, and the City of Long Beach (CA).

42. The FLEWUG agrees with several of the commenters²⁵ who believe the success of any regional planning committee depends on balanced representation of the public safety community. We support the Commission's belief that retaining members from the present regional committees would provide the benefits of continuity and would maintain the expertise gained over the past several years. However, many small public safety agencies are not represented in the regional planning process and the committees are often dominated by law enforcement. Therefore, we recommend that the regional committee membership be adjusted to include members of federal public safety agencies operating in the region and small²⁶ local public safety agencies. Similarly, the regional committee membership should be augmented to include representatives of under-represented public safety disciplines, such as fire departments and emergency medical personnel.

43. The FLEWUG agrees with commenters²⁷ that indicate the need for the regional committees to be sufficiently funded. We specifically recommend that some source of local, state, regional, and/or federal funding be provided to qualified agencies so they may participate in the regional planning process and the regional committees can afford the associated costs for the development of a regional plan. However, we feel it is premature to identify any specific funding methods.

44. The FLEWUG agrees with NPSPAC Region 20's belief that the existing NPSPAC regional plans should be separate from the new 764-776/794-806 MHz plans. We feel this management philosophy will help achieve the Commission's primary goal of promoting the efficient and equitable use of spectrum. We believe Region 20's contention that, if the plans are explicitly linked, delays in either a petition to amend the NPSPAC portion of the plan or in obtaining approval of channels in the newly allocated spectrum could be exacerbated. Furthermore, the separation of regional planning efforts would allow certain entities within 764-776/794-806 MHz to more adroitly apply for and obtain frequency assignments than agencies not involved in the NPSPAC regional planning process. Moreover, we believe that the current delays in amending regional plans that have been experienced by Region 20,²⁸ illustrate the need to make significant improvements to the planning process.

45. The FLEWUG suggests a planning and management process for the general use spectrum that is similar, but not identical to, the process we propose for the interoperability spectrum. We believe a national general use coordination body should be designated as the overall governor of the regional planning process. The duties of this body would include those duties currently carried out by the Commission as well as the development of a new national general use plan. This national general use plan would provide guidelines for the development of the new regional plans. We believe the

²⁵ The State of California, NLC, NPSTC, and the APCO International.

²⁶ It has come to the FLEWUG's attention that the vast majority of public safety agencies nationwide consist of 25 members or less.

²⁷ The NPSTC, City of Richardson (TX), State of California, NPSPAC Region 49, NPSPAC Region 20, NYSP, City of Long Beach (CA), NLC, and the CPRA.

²⁸ Comments of Region 20 Public Safety Review Committee, Legislative/Regulatory Affairs Committee, p. 12, paragraph 22.

responsibilities listed by APCO²⁹ are among, but are not all of, the issues that the national general use plan should include. The national general use coordinating body would be given the authority to review regional plans and to reject the plans based on the criteria provided in the new national general use plan. Once a regional plan is accepted, the national general use coordinating body would submit the plan for approval by the Commission. By creating an active national general use coordination body dedicated to achieving the goals provided by the Commission, we believe some of the limitations of the errant regional planning process can be rectified.

46. The FLEWUG disagrees with the Joint Commenters who believe that NPSTC should be designated as the national coordination body with oversight for the new planning process. NPTSC is not an official entity and does not operate with the appropriate authority. We suggest the creation of an official national general use coordination body. This body should be made up of users, systems managers, and government officials. It should not include persons or representatives from organizations that may benefit financially as a result of the actions of the body or that may have other conflicts of interest that could erode the body's ability to act fairly and appropriately on behalf of public safety and the public in general. The body should include participation from federal agencies to plan and foster shared systems development on the general use spectrum. The FLEWUG is willing to participate toward this end and is also willing to participate as a part of the standing coordination working group between our proposed national interoperability coordination body and national general use coordination body. We also suggest the participation of the PSWN program in the national general use coordination body and in the standing working group for coordination. Among the issues of concern for the PSWN program is shared systems development. Through activities such as PSWN symposiums, regional case studies, and national studies of procurement trends, the PSWN program is developing a significant knowledge base regarding shared systems. The evolving knowledge base and expertise of the PSWN program regarding shared systems and related matters make the PSWN program a valuable resource that should be leveraged in any national planning effort related to the new spectrum. Toward this end, the PSWN program could support the deliberations of the national general use coordination body and the standing working group.

47. The FLEWUG recommends the creation of six to eight "super-regions" to aid the national general use coordination body with its oversight and management functions. Each of these "super-regions" would consist of seven to ten adjacent NPSPAC regions with no state divided between "super-regions." "Super-region" coordination committees would be established as a part of the national general use coordination body. The membership of these committees would include the regional chairpersons and selected representatives of the regional committees that are a part of the "super-region." This body would have specific authority as arbitrator over inter-regional changes and disputes.

²⁹ APCO's outlined duties for the national planning body include providing uniform general guidelines and serving as a model for regional committees to follow, adopting a generic channel plan, developing and refining interoperability channel designations, adopting a criteria and guidelines for use of give back frequencies, providing a vehicle for coordination of inter-region planning, and acting as an "appeal board" for regional committee decisions.

Additionally, the super-region coordination committee would identify sources of funding for use by public safety agencies that lack funding to participate in the process, provide frequent guidance to regional committees in the development of regional plans, review completed regional plans, and submit completed regional plans to the national general use coordination body for review and approval. The purpose of these larger regional committees would provide support to the regional plan development process in a timely and efficient manner. By developing such a hierarchical process, we believe a better and more timely aid will be provided to regional committees in the development of their regional plans than has been provided previously.

48. The FLEWUG understands the importance of inter-regional coordination and the contention of NPSAC Region 49 that, by requiring express concurrence from adjoining regions when there is a change in a regional plan, the Commission gives undue power to adjacent regions. We believe this problem would be solved within the proposed "super-region" format.

49. The FLEWUG supports the commenters³⁰ who believe a database of frequency information should be made available to the regional planning committees. However, we believe the specific contents of this database should be developed at a later date. The FLEWUG believes this database concept also is consistent with the "super-region" concept. In the future, this database could be used by the "super-regions" to, among other things, resolve frequency disputes and monitor applications.

50. The FLEWUG believes the proposed national interoperability coordination body and the proposed national general use coordination body should coordinate and integrate their respective efforts with each other. Such coordination and integration is necessary to ensure that interoperability plans and general use plans are mutually supportive and consistent. The two bodies should establish a standing working group that meets regularly to ensure adequate coordination and integration.

2. Eligibility and Licensing of General Use Channels

51. The FLEWUG, along with the State of California, opposes the Commission's definition of public safety services. The FLEWUG, along with the State of California, supports the adoption of the PSWAC definition of public safety services. The PSWAC definition enables a situation where federal agencies could use the general use channels in a partnership or shared system environment with state and local public safety agencies. Furthermore, the PSWAC definition includes agencies other than law enforcement, fire, and EMS. The addition of these other agencies not only improves communications within the public safety community, but also may provide funding relief in a shared systems environment.

52. The FLEWUG agrees, in principle, with Motorola's comments urging the Commission not to establish "rigid standards" regarding the eligibility of agencies that are allowed access to the new public safety spectrum. However, the FLEWUG disagrees

³⁰ The NYSP, City of Richardson (TX), NLC, and the Joint Commenters.

with Motorola's contention that interpretations surrounding eligibility be deferred to the regional committees. Instead, the FLEWUG believes these interpretations should be resolved at the national level, by FLEWUG's proposed national general use coordination body. Coordination at the national level would ensure consistent interpretations throughout the entire public safety community while ensuring regional input into the process.

3. Types of Communication

53. The FLEWUG is in disagreement with both the NPSTC and the State of California with their positions on the types of communication to be supported by the general use spectrum. The former believes that there should be three types (voice, slow speed data, and high speed data) and the latter, two types (voice and data). The FLEWUG strongly advocates the NTIA's position on the four types of communications being allowed on the general use channels. The NTIA calls for each of the four types of communication (voice, data, image/high speed data [image/HSD], and video) to be made available in the general use spectrum. We believe these types of communications are currently being used by public safety agencies, and to facilitate the development of efficient and effective radio communications, each type must be available in the general use spectrum.

54. The FLEWUG cautions against premature divisions of the general use spectrum for each type of communication, and thus believes Motorola's split (14 MHz for voice/data and 10 MHz for image/HSD), and Florida's channel assignments,³¹ while forward thinking, are premature and may be inappropriate for true user needs. We agree with NTIA's belief that the amount of spectrum needed for each type of communication should be determined by the needs of the end user. Thus, we prefer the national general use coordination body be responsible for oversight of the division of general use spectrum to the different types of communication. This would allow users the flexibility to use their general use channels as needed, and still coordinate on a national level.

4. Channel Spacing and Channel Requirements

55. The FLEWUG agrees with the Commonwealth of Pennsylvania's belief that a single channel spacing standard would not provide public safety agencies with the flexibility necessary to construct systems meeting their region's specific communications needs. The FLEWUG, along with NPSPAC Region 49, believes the regional planning committees should have the authority and ability to determine minimum channel spacing requirements. Furthermore, the FLEWUG agrees, in principle, with the NPSTC contention that the regional committees operate under a uniform national plan. Specifically, the FLEWUG supports a national general use coordination body that can ensure the necessary region-to-region coordination, compatibility and equity regarding channel spacing, blocking, and requirements issues.

³¹ Comments of the State of Florida, p.5, paragraph 19.

5. Transmission Technology

56. The FLEWUG supports the commenters³² who suggest the public safety community be given the flexibility to select the equipment and technology that provides the features they desire in much the same manner that current commercial licensees select the type of technology that meets their needs. We also believe the user should decide whether analog or digital technology fits their requirements. Thus, we advocate the Commission should not mandate a transmission technology to be used on general use spectrum. Rather, we support the contention that regional planning committees, in conjunction with the national general use coordination body, determine the needed transmission types to accommodate local communication needs.

57. The FLEWUG strongly disagrees with the Commonwealth of Pennsylvania's assertion that the development of a trunking standard for the general use spectrum is not necessary. While we support the use of new technologies that are able to overcome trunking incompatibilities, we believe it is best to develop a uniform trunking standard. This standard would help ensure nationwide uniformity in public safety communications and further make efficient use of the general use spectrum.

6. Equipment Standards

58. The FLEWUG states its strong support with the State of Florida in urging the Commission to adopt receiver standards for all radios, including those in 764-776/794-806 MHz. These standards should be determined by a date certain to provide some level of consistency. To ensure the quality of public safety radio receivers, we recommend extending the basic receiver selectivity requirement for the 821-824/866-869 MHz public safety band into 764-776/794-806 MHz. The Federal Government and industry associations, such as the TIA, have long recognized and endorsed the need for receiver performance standards. These standards should be set in a fashion consistent with existing NTIA and TIA performance standards.

D. TECHNICAL PARAMETERS FOR ALL PUBLIC SAFETY CHANNELS AND OPERATIONS IN 746-806 MHz BAND

1. Bandwidth

59. Because regional needs may differ based on varying topographies, population density, spectrum use, and utilization of data and other services that require more bandwidth, the FLEWUG advocates these issues be determined for each type of spectrum by the designated planning committees, in conjunction with the appropriate national coordination body.

³² The State of Florida and the State of California.

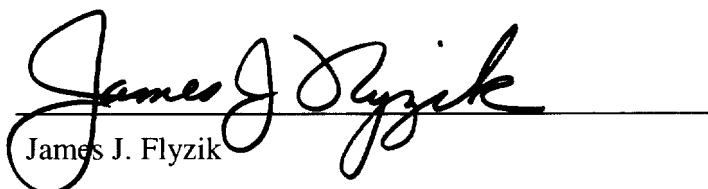
E. PROTECTION OF TELEVISION SERVICES

60. Based on the current technologies available, the FLEWUG supports the position of having the new licensees and the TV licensees privately negotiate shorter geographic separations than those proposed. However, basic separation tables should be developed to provide recommended separations.

III. CONCLUSION

61. The FLEWUG commends the efforts of all commenters to this NPRM and respectfully requests that the Commission consider carefully our positions herein submitted on many of the comments made by others. We also respectfully request that the Commission adopt the measures proposed in our original comments to the NPRM.

Respectfully submitted,



James J. Flyzik

Deputy Assistant Secretary (Information Systems) and
Chief Information Officer, Department of the Treasury, and
Vice Chair, Government Information Technology Services (GITS) Board

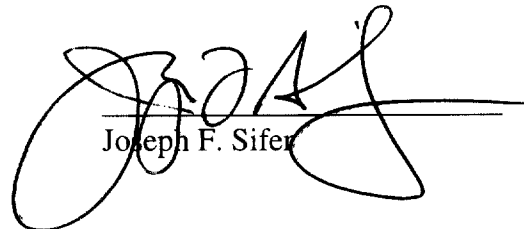
Before the
Federal Communications Commission
Washington, D.C. 20554

Certificate of Service

In the Matter of)	
)	
The Development of Operational, Technical,)	
and Spectrum Requirements for Meeting Federal,)	WT Docket No. 96-86
State, and Local Public Safety Agency Communication)	
Requirements Through the Year 2010.)	

I, Joseph F. Sifer, Senior Associate, 8283 Greensboro Drive, McLean, Virginia, 22102-3838, hereby certify that on January 26, I caused to be served, by first-class mail, postage prepaid (or by hand where noted) copies of the Federal Law Enforcement Wireless Users Group's Reply Comments *In the Matter of The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010*, WT Docket No. 96-86 (rel. October 24, 1994), the original of which is filed herewith and upon the parties identified on the attached service list.

DATED at Fair Oaks, Virginia this 26th day of January, 1998.



Joseph F. Sifer

**In the Matter of
The Development of Operational, Technical
and Spectrum Requirements for Meeting Federal,
State and Local Public Safety Agency Communication
Requirements Through the Year 2010,
WT Docket No. 96-86
Service List**

*The Honorable William E. Kennard, Chairman
Federal Communications Commission
1919 M Street, N.W.-Room 814
Washington, D.C. 20554

*The Honorable Harold Furchtgott-Roth, Commissioner
Federal Communications Commission
1919 M Street, N.W.-Room 802
Washington, D.C. 20554

*The Honorable Susan Ness, Commissioner
Federal Communications Commission
1919 M Street, N.W.-Room 832
Washington, D.C. 20554

*The Honorable Michael Powell, Commissioner
Federal Communications Commission
1919 M Street, N.W.-Room 844
Washington, D.C. 20554

*The Honorable Gloria Tristani, Commissioner
Federal Communications Commission
1919 M Street, N.W.-Room 826
Washington, D.C. 20554

*Daniel Phythyon, Chief
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W.-Room 5002
Washington, D.C. 20554

*John Clark, Deputy Director
Public Safety and Private Wireless Division
Federal Communications Commission
2025 M Street, N.W.-Room 5002
Washington, D.C. 20554

*Kathryn Hosford
Public Safety and Private Wireless Division
Federal Communications Commission
2025 M Street, N.W.-Room 8002D
Washington, D.C. 20554

*John Cimko, Jr., Chief
Policy Division
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W.-Room 7002B
Washington, D.C. 20554

*Marty Liebman
Policy Division
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W.-Room 7002B
Washington, D.C. 20554

*Mary Woytek
Policy Division
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W.-Room 7002B
Washington, D.C. 20554

*Ed Jacobs
Policy Division
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W.-Room 7002B
Washington, D.C. 20554

*David Siehl
Policy Division
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W.-Room 7002B
Washington, D.C. 20554

*Jon Reel
Policy Division
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W.-Room 7002B
Washington, D.C. 20554

*Judy Boley
Federal Communications Commission
Room 234
1919 M Street, N.W.
Washington, D.C. 20554

Timothy Fain
OMB Desk Officer
10236 NEOB
725 17th Street, N.W.
Washington, D.C. 20503

*International Transcription Service, Inc.
1231 20th Street, N.W.
Washington, D.C. 20036

American Petroleum Institute
Wayne V. Black
Keller and Heckman LLP
1001 G Street, N.W.
Suite 500 West
Washington, D.C. 20001

Robert J. Bavis, III, Communications Associate
Disaster Services
American Red Cross
Jefferson Park
8111 Gatehouse Road
Falls Church, VA 22042